

DEF EXPO 2018 AND BEYOND: Prospects for Transforming India from an Arms Importer to a Defence Manufacturing Hub

by Anil Ahuja



The 10th edition of biennial Indian Defence Exposition (Def Expo), with the theme “India: The emerging defence manufacturing hub”, was held from April 11-14, 2018 near Chennai. The event was formally inaugurated by the Prime Minister, underscoring the purposefulness with which the objective of transforming India from a defence importer to a major military manufacturing hub is (now) being pursued.



Prime Minister Delivering Inaugural Address at Def Expo on 12 April 2018

The event witnessed extensive participation by foreign and domestic defence industry, with a substantial increase in participation by Indian MSMEs (medium and small enterprises) over previous editions. The event was characterised by:

- A concerted emphasis, supported at the highest level, on making India a defence manufacturing hub.
- An endeavour to shift the focus of the Indian Def Expos from being ‘import’ to ‘export’ oriented.
- A focus on reviewing and updating production, acquisition and defence export related policies.

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Author:

Lt Gen Anil Ahuja (Retd), Senior Fellow,
Delhi Policy Group

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Ambassador Hemant Krishan Singh
Director General

Run-up to the Event

Prior to the Defence Expo, the MOD's 'Technology Perspective and Capability Road Map (TPCR) - 2018¹' was released in February, 2018. The document, considered to be the public version of the 'Long Term Integrated Perspective Plan (LTIPP)', is meant to provide the industry with an overview of the equipment that is envisaged to be inducted into the armed forces up to the late 2020s. It is also meant to be a guide to the industry for planning technology development, partnership and production arrangements.

Secondly, the Ministry of Defence released the 'Draft Defence Production Policy (DPrP) – 2018²' on March 21, 2018. This draft policy, which is still under finalisation, sets out an ambitious vision and challenging goals to be achieved in the field of defence production till 2025. Highlights of the policy are:

1. Making India among the top five countries of the world in Aerospace and Defence Sectors.
2. Achieving self-reliance in development and manufacture of 13 major weapons systems by 2025 (*Fighter aircraft, helicopters, warships, land combat vehicles, guns and missile systems, small arms & ammunitions, surveillance, communication & electronic warfare systems, night enablers and autonomous weapon systems*)
3. Achieving a turnover of Rs 1700 Billion (USD 26 Bn.) in defence goods and services output with additional investment of Rs 700 Billion (USD 10 Billion) thereby creating employment for 2 to 3 Million people.
4. Achieving exports of Rs 350 Billion (USD 5 Billion.) in defence goods and services by 2025.

Thirdly, on April 6, 2018, the Indian Air force released a new 'Request for Information (RFI)' for acquisition of 110 fighter jets (single / twin engine) at an estimated cost of USD 20 Billion, seeking responses by July 6, 2018³. It was announced that the aircraft will be procured under the government's 'Strategic Partnership (SP)' model. This announcement added to the interest and engagement of global defence aerospace majors at the Def Expo.

Fourthly, on April 9, 2018, the Army announced the signing of a Rs 7 Billion (USD 106 Million) contract for procuring approximately 0.2 million (out of a total requirement of approximately 0.35 million) bullet proof jackets⁴. Signing of this long delayed contract in the 'Buy Indian' category helped create an upbeat mood amongst the not so enthusiastic indigenous defence manufacturers.

These events set the tone for the Def Expo which was launched by the *Raksha Mantri* and inaugurated by the Prime Minister on April 12, 2018.

The Prime Minister's Address at the Inauguration of Def Expo⁵

"...the strategic imperative to make in India, to make for India and to supply to the world from India is stronger than ever before..."

This statement by the Prime Minister while inaugurating the Def Expo seemed to be indicative of the resolve to reverse the unenviable status of India being the world's largest arms importer and to change the way India looks at defence manufacturing, defence acquisitions and defence exports.

The Prime Minister admitted that the primary responsibility of changing the prevailing trend rests with the government due to the unique nature of defence manufacturing, which entails government controlled licensing, armed forces-centric (government controlled) procurements and government regulated defence exports. He highlighted numerous reforms that have been made in the recent past in issuing manufacturing licences, managing defence offsets, according export clearances, attracting foreign direct investment (FDI) and in further refining the defence procurement procedure (DPP). He substantiated with statistics the positive results achieved by making industry-friendly policies and processes.

PM Modi also reiterated the commitment made in the last budget of establishing two Defence Industrial Corridors in Tamil Nadu (Chennai – Salem – Coimbatore – Trichy – Hosur – Bengaluru) and Uttar Pradesh (Aligarh – Agra – Jhansi – Chitrakoot – Kanpur and Lucknow).

Particular emphasis was laid on acknowledging the significance of technology, innovation and research & development (R&D) in the defence sector. The PM announced the launching of an 'Innovation for Defence Excellence' scheme, which will encourage setting up of defence innovation hubs throughout the country to provide necessary incubation and infrastructure to start-ups. He added that routing of private venture capital into the defence sector will also be encouraged.

Significant Activities at Def Expo 2018

The Mahindra Group signed a MoU with ShinMaywa Industries Limited, Japan, to manufacture, assemble and provide MRO (maintenance, repair and overhaul) facilities for the US-2 Amphibious Aircraft⁶. This is a step forward in the long on-going India-Japan deliberations for the procurement of this aircraft for the Indian Navy.

Mahindra also formed a partnership with the Israel-based Aeronautics Limited to licence produce the maritime version of unmanned aerial vehicles for possible sale to the Indian Navy (IN)⁷.

Concurrently, Boeing signed an agreement with Mahindra Defence Land Systems and Hindustan Aeronautics Limited to produce the F/A 18 Super Hornet aircraft under the 'Make in India' initiative⁸. With this arrangement, it has created viable options for progressing future manufacturing programmes with both, a major DPSU and a private sector partner with past experience.

The US delegation aggressively presented the offer of American fighter jets, with proposed manufacturing of F-16s in India coupled with substantial transfer of technology⁹, nuances of which are likely to be discussed during the forthcoming India-US 2+2 ministerial dialogue.

Seven MoUs were signed between Indian and Russian companies¹⁰ for developing underwater platforms and Fregat Radars (Ship borne 3D radar) for the Indian Navy; providing technical and logistics support for T90s and T72 tanks for the Army; and for technical and logistics support to the Air Force for Su-30 MKI fighter aircraft and MI-8, MI-17 and MI-35 type helicopters.

It was also announced that the technical configuration of the Kamov Ka-226T light utility helicopters, 200 of which are planned to be acquired for the Army and Air Force, had finally been approved¹¹. This is a positive development, considering the acute requirement of light helicopters for the Army and Air force.

The Kalyani Group (Bharat Forge) unveiled a variety of new Artillery guns being designed and developed by them. These included an ultra-light (ULH) 155mm/39 field artillery gun weighing less than 4.8 tons (*155/ 39 Bofors gun weighs approximately 12 tons*), an advanced hybrid recoil ULH weighing less than 4.5 tons and a 4x4 mounted gun system¹². Larsen & Toubro (L&T) and MBDA also unveiled the futuristic ATGM 5

missile system to meet the visualised needs of the Army¹³. These exhibits are indicative of the potential now available within the country which can be built upon for domestic and export markets.

The DRDO launched a "Transfer of Technology" (TOT) drive, offering technologies for products like ASTRA missile; Varunastra heavyweight torpedo; Anti-Thermal Laser Grenades; HUMSA-UG (Upgraded Sonar system), ABHAY (active cum passive Sonar) etc to private industry and DPSUs¹⁴. This initiative was spurred by Rs 1.9 Billion in revenues generated by transfer of around 200 technologies over the last three years.

Analysis and Comments

The objective of developing an indigenous defence industrial base and reversing the trend of defence imports has been engaging the attention of MOD policy makers for long. Enhancing defence production has also been amongst the focus areas under the 'Make in India' programme, although with less than satisfactory results. This time around, however, the affirmation made by the Prime Minister to transform India into a defence manufacturing hub may hopefully signal a 'turning point'.

Creation of a domestic defence manufacturing hub would be a cumulative function of identified future needs against specified time lines, assured and prioritised budgetary support, a long term plan for developing or acquiring critical technologies, an outcome-oriented acquisitions procedure and a pragmatic defence export policy. This entails the following:

- Providing a sense of direction to the force structuring and capability development of the armed forces by formulation of a National Security Strategy (NSS) and National Defence Strategy (NDS). Prospects of this transpiring have improved with the recent constitution of a Defence Planning Committee (DPC).
- Formulation of a Long Term Integrated Perspective Plan (LTIPP) to support the objectives of the NSS and NDS. The programmes / weapon systems included in this should be prioritised (intra and inter- service prioritisation) on the basis of criticality of capability voids, from the perspective of India's military objectives.

- Promulgation of a 'pragmatic' TPCR (Technology Perspective and Capability Road Map). TPCR – 2018, like the earlier 2013 version, comes with a 'disclaimer' that *"this is not a commitment by the armed forces or the government to procure any of the said equipment and that participation by the industry is at its discretion"*. This also gives no indication of the indicative costs of the programme. It would be hard to imagine private industry making huge investments on the basis of such vague requirements without any commitment from the MOD.
- Assured budgetary support needs to be provided for at least the priority programmes included in the LTIPP and in its public version, the TPCR.
- An appreciation of the necessity to create an 'assured defence products market', within the country or abroad, is a pre-requisite for creating a 'manufacturing hub'. Industry would require an understanding of whom are they to manufacture for and predictability of the nature of demand.
- Extensive overhaul of both the Defence Procurement Organisation and the Defence Procurement Procedure. A serious weakness of the prevailing organisational structure is the disconnect between the drafters of the DPrP, the Department of Defence Production (DDP) and others, i.e., the Director General Acquisitions under the Department of Defence; Defence Finance and the DRDO. Departments other than the DDP would, under the prevailing circumstances, have no motivation / commitment or accountability to make the policy assertions at the Def Expo succeed. Besides the organisational structures, even the provisions of the DPP do not support the ambitious aims set forth in the DPrP and are likely to become an impediment rather than enabler to achieving such ambitious goals.
- An objective review of the Strategic Partnership Model, which is still under formulation, seems imperative. The Dhirendra Singh Committee and the Aatre (Dr VK Aatre) Task Force had, in 2015, recommended introduction of the 'Strategic Partnership Model'. The rationale was accepted by the Cabinet Committee on Security (CCS) in May 2017. Notwithstanding the merits of the proposal, the model has failed to find traction. This has resulted in inordinate delays being caused for acquisition of major platforms. In order to achieve the objectives set forth in the DPrP by 2025, it may be better to defer the implementation of the SP Model and go ahead with procurements under other accepted categories. The SP model could perhaps be matured for implementation subsequently.
- A review of the acquisition system to achieve the ambitious goals of '**making in India, making for India and of supplying to the world from India**' identified as a strategic imperative by the PM at Def Expo. These goals can only be achieved by carrying out acquisitions on 'strategic considerations', rather than the 'process driven acquisitions' being carried out presently. The acquisitions also need to be supported by 'strategic funding' for the developer or manufacturer and by lines of credit for the prospective buyer. The proposals need to be evaluated on cumulative considerations of cost, technology acquired, jobs created and other strategic pay-offs in national interest. These pay-offs need to be evaluated on a 10–15 years' time line, required to create a defence industrial base.
- Evolving of an International defence cooperation road map considering visualised major acquisition programmes, since this entails planning for acquiring futuristic weapons technology, setting up of production facilities and assurance of a committed relationship of three to five decades.
- A concerted effort is also required to integrate private industry into the defence production system, which is still inadequate. Transfer of technology for private industry may be required to be factored into acquisitions in addition to the technology being acquired for DPSUs even at an extra cost. This price would be worth paying to create these new manufacturing hubs and future incubators of defence products. Issues of level playing field for private sector and management of offsets remain perpetual sore points, which need to be addressed pragmatically.
- A robust corporatized defence export organisation would need to be created to pro-actively market Indian defence products. Quality assurance and intimate product support must be ensured from the outset to create acceptability of Indian origin products.

While the scheme launched for 'Innovation for Defence Excellence' is welcome, the challenge is to canalise research into the creation of sub systems and system of systems. A greater synergy is also required to be created between the DRDO and the Services for progressing mission mode programmes, with the latter assuming greater ownership of their programmes.

Conclusions

Achievements of the Ministry of Defence in drafting the new DPrP – 2018 with challenging goals and in refining the Defence Procurement Procedure (DPP), including regulations related to licensing, offsets, FDI and defence exports, are commendable but still remain modest in comparison with the challenges yet to be addressed. With the level of commitment now having been raised to the Prime Minister, the Ministries of Defence and Finance now face a challenge of credibility where **failure is not**

an option. The change needs to begin by synergising actions of all stakeholders and making them accountable to a high level implementation committee.

Making India a 'manufacturing hub' is however not about manufacturing alone. It is about developing or acquiring high-end technology, obtaining quality machinery and raw material, manufacturing quality products, ensuring speedy acquisitions and robust lifetime support to products not only for India's own armed forces but also for export to friendly foreign countries. This 'mission' needs to be implemented against stringent time lines to make this much delayed transformation successful.

Endnote:

- ¹ Ministry of Defence (India). https://mod.gov.in/sites/default/files/tpcr_0.pdf
- ² Ibid. <http://www.makeinindia.defence.gov.in/Defence%20Production%20Policy%202018old.pdf>
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- ¹² Kalyani Group launches futuristic Artillery Guns. Indian Defence Review. April 14, 2018. <http://www.indiandefencereview.com/news/kalyani-group-launches-futuristic-artillery-guns/>
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Delhi Policy Group

Core 5A, First Floor, India Habitat Centre
Lodhi Road, New Delhi 110003
Phone: +91 11 48202100
Website: www.delhipolicygroup.org
Email: dg@dpg.org.in; dgooffice@dpg.org.in

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